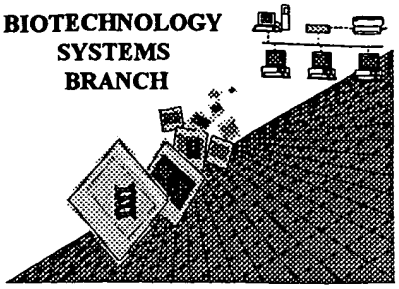
5 to 12

RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number: 09/105,117E

Art Unit / Team No. : 1652

Date Processed by STIC: 9/28/99

THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.

PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,

2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY

THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.

IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:

MARK SPENCER 703-308-4212

Raw Sequence Listing Error Summary

ERROR DETECTED | SUGGESTED CORRECTION | SERIAL NUMBER: 09/105,117E

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 ____ Wrapped Nucleics
The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

2 ____ Wrapped Aminos
The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

3 ____ Incorrect Line Length
The rules require that a line not exceed 72 characters in length. This includes spaces.

4 ____ Misaligned Amino Acid Numbering
The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.

5 ____ Non-ASCII
This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.

6 ____ Variable Length
Sequence(s) ____ contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.

7 ____ PatentIn ver. 2.0 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence.

8 ____ Skipped Sequences (OLD RULES)
Sequence(s) ____ missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(I) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xI) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).

9 ____ Skipped Sequences (NEW RULES)
Sequence(s) ____ missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

10 ____ Use of n's or Xaa's (NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

11 ____ Use of <213>Organism (NEW RULES)
Sequence(s) _____ are missing this mandatory field or its response.

12 ____ Use of <220>Feature (NEW RULES)
Sequence(s) ____ are missing the <220>Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)

13 ____ PatentIn ver. 2.0 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

AKS-Biotechnology Systems Branch- 5/15/99

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/105,117E

DATE: 09/28/1999
TIME: 14:26:31

Input Set: I105117E.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

Does Not Comply
Corrected Diskette Needed

```
      1  <110> APPLICANT: Vrjic, Marina
      2        Eggeling, Lothar
      3        Sahm, Harmann
      4  <120> TITLE OF INVENTION: PROCESS FOR THE MICROBIAL PRODUCTION OF AMINO ACIDS BY
      5        BOOSTED ACTIVITY OF EXPORT CARRIERS
      6  <130> FILE REFERENCE: Fj 122 sequence listing
      7  <140> CURRENT APPLICATION NUMBER: US/09/105,117E
      8  <141> CURRENT FILING DATE: 1998-06-17
      9  <150> EARLIER APPLICATION NUMBER: PCT/DE96/02485
     10  <151> EARLIER FILING DATE: 1996-12-18
     11  <150> EARLIER APPLICATION NUMBER: 195 48 222.0
     12  <151> EARLIER FILING DATE: 1995-12-22
     13  <160> NUMBER OF SEQ ID NOS: 3
     14  <170> SOFTWARE: PatentIn Ver. 2.1
     15  <210> SEQ ID NO 1
     16  <211> LENGTH: 307
     17  <212> TYPE: PRT
     18  <213> ORGANISM: Corynebacterium glutamicum
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     22        Ser Phe Glu Gly Ala Ser Leu Ala Leu Ser Ile Ser Pro Ser Ala Val
     23                      20                  25                  30
     24        Ser Gln Arg Val Lys Ala Leu Glu His His Val Gly Arg Val Leu Val
     25                35                  40                  45
W--> 26        Ser Arg His Glu Leu Ile Xaa Thr Arg Asn His Glu Leu Ile Xaa Met
     27             50                  55                  60
     28        Thr Ile Val Thr Gln Pro Ala Lys Ala Thr Glu Ala Gly Glu Val Leu
     29         65                  70                  75                  80
     30        Val Gln Ala Ala Arg Lys Met Val Leu Leu Gln Ala Glu Thr Lys Ala
     31                        85                  90                  95
     32        Gln Leu Ser Gly Arg Leu Ala Glu Ile Pro Leu Thr Ile Ala Ile Asn
     33                    100                 105                 110
     34        Ala Asp Ser Leu Ser Thr Trp Phe Pro Pro Val Phe Asn Glu Val Ala
     35                115                 120                 125
     36        Ser Trp Gly Gly Ala Thr Leu Thr Leu Arg Leu Glu Asp Glu Ala His
     37            130                 135                 140
     38        Thr Leu Ser Leu Leu Arg Arg Gly Asp Val Leu Gly Ala Val Thr Arg
     39        145                 150                 155                 160
     40        Glu Ala Asn Pro Val Ala Gly Cys Glu Val Val Glu Leu Gly Thr Met
     41                        165                 170                 175
     42        Arg His Leu Ala Ile Ala Thr Pro Ser Leu Arg Asp Ala Tyr Met Val
     43                    180                 185                 190
     44        Asp Gly Lys Leu Asp Trp Ala Ala Met Pro Val Leu Arg Phe Gly Pro
```

see item 10 on Error Summary Sheet

```
                195                 200                 205
      Lys Asp Val Leu Gln Asp Arg Asp Leu Asp Gly Arg Val Asp Gly Pro
          210                 215                 220
      Val Gly Arg Arg Arg Val Ser Ile Val Pro Ser Ala Glu Gly Phe Gly
      225                 230                 235                 240
      Glu Ala Ile Arg Arg Gly Leu Gly Trp Gly Leu Leu Pro Glu Thr Gln
                      245                 250                 255
      Ala Ala Pro Met Leu Lys Ala Gly Glu Val Ile Leu Leu Asp Glu Ile
                  260                 265                 270
      Pro Ile Asp Thr Pro Met Tyr Trp Gln Arg Trp Arg Leu Glu Ser Arg
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      Ser Leu Ala Arg Leu Thr Asp Ala Val Val Asp Ala Ala Ile Glu Gly
          290                 295                 300
      Leu Arg Pro
      305
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<212> TYPE: PRT
<213> ORGANISM: Corynebacterium glutamicum
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                   20                  25                  30
      Ile Lys Arg Glu Gly Leu Ile Ala Val Leu Leu Val Cys Leu Ile Ser
               35                  40                  45
      Asp Val Thr Met His Thr Met His Phe Leu Phe Ile Ala Gly Thr Leu
           50                  55                  60
      Gly Val Asp Leu Leu Ser Asn Ala Ala Pro Ile Val Leu Asp Ile Met
       65                  70                  75                  80
      Arg Trp Gly Gly Ile Ala Tyr Leu Leu Trp Phe Ala Val Met Ala Ala
                      85                  90                  95
      Lys Asp Ala Met Thr Asn Lys Val Glu Ala Thr Met His Pro Gln Ile
                  100                 105                 110
      Ile Glu Glu Thr Glu Pro Thr Val Pro Asp Asp Thr Pro Leu Gly Gly
              115                 120                 125
      Ser Ala Val Ala Thr Asp Thr Arg Asn Arg Val Arg Val Glu Val Ser
          130                 135                 140
      Val Asp Lys Gln Arg Val Trp Val Lys Pro Met Leu Met Ala Ile Val
      145                 150                 155                 160
      Leu Thr Trp Leu Asn Pro Asn Ala Tyr Leu Asp Ala Phe Val Phe Ile
                      165                 170                 175
      Gly Gly Val Gly Ala Gln Tyr Gly Asp Thr Gly Arg Trp Ile Phe Ala
                  180                 185                 190
      Ala Gly Ala Phe Ala Ala Ser Leu Ile Trp Phe Pro Leu Val Gly Phe
              195                 200                 205
      Gly Thr Met His Thr Met His Ala Ala Ala Leu Ser Arg Pro Leu Ser
          210                 215                 220
      Ser Pro Lys Val Trp Arg Trp Ile Asn Val Val Val Ala Val Val Met
      225                 230                 235                 240
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     96                          245                 250
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     99   <212> TYPE: DNA
    100   <213> ORGANISM: Corynebacterium glutamicum
    101   <400> SEQUENCE: 3
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    104          ccgrgaadvv acagacactc agatcgatct ctagatctaa ggtccgcggt agcaacggtt 180
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VERIFICATION SUMMARY
PATENT APPLICATION **US/09/105,117E**

DATE: 09/28/1999
TIME: 14:26:31

Input Set: **I105117E.RAW**

Line	?	Error/Warning	Original Text
26	W	"N" or "Xaa" used: Feature required	Ser Arg His Glu Leu Ile Xaa Thr Arg Asn H
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115	W	"N" or "Xaa" used: Feature required	gwsavnvwts gcttagacgc aactaccgct accaattg
116	W	"N" or "Xaa" used: Feature required	tatcaacgcg sdanatargs aaaatcaaag acgaacgt
122	W	"N" or "Xaa" used: Feature required	tsgdstdnmr bsatattaaa ccatgttaag aaccaatc
125	W	"N" or "Xaa" used: Feature required	gcgcgaagga ctcattgcgg ttctnvvkgk rgavtctc
127	W	"N" or "Xaa" used: Feature required	gccgatcgtg ctcgatatta tgcgctgggg tggcatcg
129	W	"N" or "Xaa" used: Feature required	vmaakdamtn kvagatcatt gaagaaacag aaccaacc
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